REMARKS

The Final Office Action of November 23, 2009 ("Final Office Action"), has been received and reviewed. Claims 1-5, 7-16, 18-67, 69-90, and 94-119 are currently pending in the application and stand rejected. Claims 29, 30, 66, and 67 are withdrawn from consideration. Applicants propose to amend the specification, and respectfully request reconsideration of the application as proposed to be amended herein.

Pursuant to 37 C.F.R. § 1.116, Applicant respectfully submit that the proposed amendments presented herein should be entered as the proposed amendments are believed to place the application in condition for allowance. Accordingly, entry of the present amendments, as an earnest attempt to advance prosecution and/or to reduce the number of issues, is requested under 37 C.F.R. §1.116.

Amendments to the Specification

Applicants have amended the "Cross-Reference to Related Applications" section of the specification to update the status of U.S. Patent Application Serial No. 10/727,093 and to add additional related applications by way of inserting a new paragraph into the specification. Applicants note that two of the three applications listed in the newly inserted paragraph are under the Examiner's care. However, the third application has recently been assigned to another Examiner in the same Group Art Unit. These amendments serve to provide formal notification of the relationship of the current application to the following copending applications: U.S. Patent Application Serial No. 10/727,093, U.S. Patent Application Serial No. 12/042,200, U.S. Patent Application Serial No. 11/409,257, and U.S. Patent Application Serial No. 12/478,019. No new matter has been added.

Responses to Prior Arguments

As an initial matter, Applicants note that the Examiner has failed to address or respond to the specific arguments set forth in Applicants' Response filed on September 17, 2009,

Amendment filed on March 13, 2008, Pre-Appeal Brief filed on August 18, 2008, Amendment filed on March 2, 2009, and Amendment filed on July 20, 2009, other than to state that "Applicant[s'] arguments have been considered but are moot in view of the new ground(s) or rejection" or "Applicant[s'] amendment necessitated the new ground(s) of rejection." Office Action of October 1, 2008, p. 2, Final Office Action of April 20, 2009, p. 7, and Office Action of August 13, 2009, p. 2. Applicants submit that such an approach to examination is clearly contrary to established examination guidelines because it encourages piecemeal examination. Particularly, Applicants note that "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." M.P.E.P. § 707.07(f) (emphasis added).

Applicants' arguments in the above-mentioned responses provide specific reasons rebutting the Examiner's alleged *prima facie* case of obviousness. However, since the Examiner has not addressed Applicants' arguments, Applicants have been unable to prepare appropriate responses thereto. In order for Applicants to continue to advance prosecution, Applicants respectfully request that the Examiner provide specific responses to the arguments presented herein.

Duration of Prosecution

The obviousness rejections in the Office Action of August 13, 2009, and the Final Office Action rely primarily on U.S. Patent No. 5,449,041 to Galbraith ("Galbraith") and U.S. Patent No. 6,019,861 to Canterberry *et al.* ("Canterberry"). Applicants note that a similar combination of Galbraith and Canterberry was relied upon by the Examiner in the Final Office Action of June 16, 2008, p. 2. In response to the Final Office Action of June 16, 2008, Applicants filed a Notice of Appeal and Pre-Appeal Brief on August 15, 2008, in which the rejections in light of Galbraith and Canterberry were addressed. On September 25, 2008, a Notice of Panel Decision from Pre-Appeal Brief Review was transmitted, in which prosecution was reopened and the previous rejections were withdrawn. In the Office Action of October 1, 2008, the Examiner relied upon

Galbraith in combination with additional references. This fact, in combination with the Notice of Panel Decision from Pre-Appeal Brief Review, indicated to Applicants that the previous rejections in light of Galbraith and Canterberry had been overcome.

However, prosecution now appears to have come full circle in that the Examiner, over eighteen months later, relies upon the same combination of Galbraith and Canterberry to reject the pending claims, even though rejections in light of that combination of references had been previously addressed by Applicants and withdrawn by the Examiner. While Applicants noted this point in Applicants' Response filed on September 17, 2009, the Examiner provided no response thereto in the Final Office Action. In addition, Applicants note that this application has been pending for over six years and has undergone substantial prosecution. However, little progress has been made to advance the application to allowance.

Applicants respectfully request prompt and favorable resolution of the remaining rejections in order to advance prosecution to issuance of a notice of allowability.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on Galbraith in View of Canterberry

Claims 1-5, 7-14, 18, 22-25, 57-65, 69, 72-75, 77, 78, 96-106, and 115-119 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry. Applicants respectfully traverse this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* M.P.E.P. § 2143.03. Additionally, the Examiner must determine whether there is "an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-1741, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Further, rejections on obviousness grounds "cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* at 1741, quoting

In re Kahn, 441, F.3d 977, 988 (Fed. Cir. 2006). Finally, to establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); M.P.E.P. § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The obviousness rejection of claims 1-5, 7-14, 18, 22-25, 57-65, 69, 72-75, 77, 78, 96-106, and 115-119 is improper because Galbraith and Canterberry do not teach or suggest all of the limitations of the claims. In addition, there is no reason to modify the references in the manner asserted by the Examiner.

The teachings of Galbraith and Canterberry are as described on p. 4-6 of Applicants' Response filed on September 17, 2009.

Claims 1-5, 7-14, 18, 22-25, 96-100, and 115

Galbraith and Canterberry, alone or in combination, do not teach or suggest all the limitations of independent claim 1 because nothing in Galbraith or Canterberry teaches or suggests the limitation of "the at least one gas generant comprising a non-azide, non-azole, non-aminoguanidine nitrate, non-triaminoguanidine nitrate composition formulated to pyrotechnically produce no sodium chloride and an inert gas mixture comprising carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide." Galbraith does not teach or suggest this limitation because its solid propellants are azide- or azole-based. In addition, Galbraith does not teach or suggest that the solid propellants used in its apparatus produce carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration. While Galbraith discloses that carbon

dioxide, nitrogen, and water vapor are produced upon ignition of the solid propellant, Galbraith does not teach relative amounts of the produced gases.

Canterberry also does not teach or suggest the claimed gas concentration limitation. The Examiner states that Tables II and III show that the gas generating compositions of Canterberry, when combusted, produce levels of carbon dioxide that are less than the desirable levels and that these desirable levels are equivalent to the Immediately Harmful to Life or Health concentrations. Office Action of Office Action of August 13, 2009, p. 2. However, the gas analysis results shown in Table II are for gas generating compositions that include 5-aminotetrazole (an azole) as the non-azide fuel. Since these combustion results are for gas generating compositions that include 5-aminotetrazole, these do not support the Examiner's assertion because these gas generating compositions are not *non-azole* compositions as recited in claim 1. While Canterberry teaches that oxamide may be used as the fuel, Canterberry does not teach or suggest specific compositions that include oxamide. Since the production of carbon dioxide is dependent upon the ingredients in the gas generating compositions and since specific compositions that include oxamide are not taught or suggested, Canterberry does not and cannot teach or suggest the amounts of carbon dioxide produced upon combustion of a composition that includes oxamide. Furthermore, one of ordinary skill in the art would expect an oxamide-containing composition, upon combustion, to produce a greater amount of carbon dioxide than is produced by a similar composition containing 5-aminotetrazole. Such an oxamide-containing composition would produce more carbon dioxide because oxamide (chemical formula of $C_2H_2N_2H_4$) includes two atoms of carbon per mole of oxamide compared to 5-aminotetrazole (chemical formula CH_3N_5), which includes one atom of carbon per mole of 5-aminotetrazole.

When discussing Canterberry, the Examiner states that "it would be obvious to one having ordinary skill in the art . . . that the level of carbon dioxide produced would be less than or equal to the Immediately Harmful to Life or Health concentration." Final Office Action, p. 2. However, the Examiner has provided no reasoning in support of this statement. Furthermore, the Examiner has not responded to Applicants' arguments above, which were set forth in Applicants'

Response filed on September 17, 2009, that the combustion results in Canterberry are for gas generating compositions that include an azole compound and that an oxamide-containing composition would produce greater amounts of carbon dioxide due to the higher carbon content of oxamide.

The Examiner also states that "[s]ince the Immediately Harmful to Life or Health concentration as recited in claim 1 is obviously a requirement of some sort, it would be obvious to one having ordinary skill in the art that the carbon dioxide produced would [be] equal to or less than this requirement." Final Office Action, p. 7. As best understood by Applicants, the Examiner appears to be saying that because the Immediately Harmful to Life or Health concentration is a requirement, the concentration of carbon dioxide produced would necessarily be less than that concentration. However, the amount of carbon dioxide produced is dependent on the ingredients in the gas generating composition that is combusted, and is not dependent on the existence of the so-called "requirement." Therefore, it is unclear how the Examiner believes this statement provides a reason in support of the obviousness of claim 1.

Galbraith and Canterberry also do not teach or suggest the limitation of "the fire suppression system configured to dispel, at an exit thereof, the inert gas mixture to provide a dispelled inert gas mixture into a space, the dispelled inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant." Galbraith does not teach or suggest this limitation because Galbraith does not teach or suggest relative amounts of the produced gases or relative amounts of the gases that are directed from the apparatus and into the environment. Galbraith also does not teach or suggest this limitation because the apparatus of Galbraith includes cooling material 38, magnesium carbonate containing propellant 72, and/or magnesium carbonate cooling bed 76, each of which produces CO_2 when heated, which occurs upon ignition of the solid propellant 14, *i.e.*, when the apparatus of Galbraith is used. The CO_2 produced by the cooling material 38, magnesium carbonate containing propellant 72, or magnesium carbonate cooling bed 76 is in addition to the CO_2 produced by ignition of the solid propellant 14. The CO_2 produced by

ignition of the solid propellant 14 and the CO_2 produced by the cooling material 38, magnesium carbonate containing propellant 72, and/or magnesium carbonate cooling bed 76 exit the apparatus and are used to suppress the fire. Since the gases exiting the apparatus of Galbraith include CO_2 *in addition to* the CO_2 produced by the combustion of the solid propellant 14, Galbraith does not teach or suggest that "the dispelled inert gas mixture compris[es] carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant." Rather, Galbraith clearly teaches that carbon dioxide in addition to that produced by combustion of the solid propellant 14 exits the apparatus.

The Examiner states that "[s]ince the [g]as generant of Galbraith produces CO2 of a certain concentration when ignited, the CO2 concentration [in] the inert gas mixture dispelled would be substantially equal to the CO2 concentration produced by the gas generant." Final Office Action, p. 7. However, the Examiner has not provided a response to Applicants' arguments above, which were also set forth in Applicants' Response filed on September 17, 2009, regarding the additional CO_2 that is present in the apparatus of Galbraith and which exits the apparatus along with the CO_2 produced by the combustion of the solid propellant 14. Therefore, contrary to the Examiner's assertion, Galbraith clearly does not support the Examiner's statement.

Canterberry does not cure the deficiencies in Galbraith because Canterberry is silent about details of a fire suppression device and its operation. Therefore, Canterberry also does not teach or suggest the above-mentioned limitation.

The Examiner has not identified any portion of Galbraith or Canterberry that teaches or suggests the above-mentioned limitation. While the Examiner states that "the gas generant [of Galbraith is] formulated to pyrotechnically produce an inert gas mixture comprising carbon dioxide in a concentration equal to the concentration pyrotechnically produced by the at least one gas generant," this language is not the language actually recited in claim 1. Office Action of August 13, 2009, p. 2. Rather, claim 1 recites that the dispelled inert gas mixture, not the inert gas mixture pyrotechnically produced by the gas generant, comprises carbon dioxide in a

concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant.

In addition, there is no reason in the applied references, common knowledge, or the nature of the problem itself to modify the references in the manner asserted by the Examiner. The Examiner states "[i]t would have been obvious . . . to have modified the device of Galbraith et al. by using a non-azide, non-azole composition to produce an inert gas mixture as has been taught by Canterberry et al. to produce a safe gas mixture." Final Office Action, p. 3. However, even if the apparatus of Galbraith was modified to include the composition of Canterberry, the claimed invention would not be produced because the apparatus of Galbraith would include cooling material 38, magnesium carbonate containing propellant 72, and/or magnesium carbonate cooling bed 76. Therefore, as described above, additional CO_2 would be produced by the cooling material 38, magnesium carbonate containing propellant 72, and/or magnesium carbonate cooling bed 76. The apparatus of Galbraith, as modified by Canterberry, would not be configured to dispel an inert gas mixture, the dispelled inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant because the carbon dioxide exiting the apparatus of Galbraith would include carbon dioxide that is not pyrotechnically produced, in addition to carbon dioxide that is produced by combustion of the solid propellant 14.

Dependent claims 2-5, 7-14, 18, 22-25, 96-100, and 115 are allowable, *inter alia*, as depending from allowable claim 1.

Claims 57-65, 69, 72-75, 77, 78, and 101-106

Galbraith and Canterberry, alone or in combination, do not teach or suggest all of the limitations of claim 57 because neither reference teaches or suggests the limitations of "igniting at least one non-azide, non-azole, non-aminoguanidine nitrate, non-triaminoguanidine nitrate gas generant to produce an inert gas mixture comprising carbon dioxide" and "dispersing the inert gas mixture into a space to extinguish a fire, the dispersed inert gas mixture comprising carbon

dioxide in a concentration substantially equal to the concentration produced by ignition of the at least one gas generant such that the space comprises carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide." Galbraith and Canterberry do not teach or suggest these limitations for substantially the same reasons as discussed above with respect to claim 1.

The Examiner states that "[t]he device [of Galbraith] will carry out the methods of claims 57-61." Final Office Action, p. 3. However, this one sentence, conclusory statement is not sufficient to establish a *prima facie* case of obviousness because the language actually recited in claim 57 includes method limitations, not structural limitations. Therefore, relying on the applied references as teaching the method limitations of claim 57 merely because the device of Galbraith will allegedly carry out the claimed method does not support a conclusion of obviousness.

In addition, there is no reason in the applied references, common knowledge, or the nature of the problem itself to modify the references in the manner asserted by the Examiner for substantially the same reasons as discussed above with respect to claim 1.

Dependent claims 58-65, 69, 72-75, 77, 78, and 101-106 are allowable, *inter alia*, as depending from allowable claim 57.

Claim 116

Galbraith and Canterberry, alone or in combination, do not teach or suggest the limitation in claim 116 of "the fire suppression system configured to dispel, at an exit thereof, the first gas mixture and a second gas mixture comprising carbon dioxide into a space to provide carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide in the space." Galbraith does not teach or suggest this limitation because CO_2 is produced by the cooling material 38, magnesium carbonate containing propellant 72, or magnesium carbonate cooling bed 76, and the solid propellant 14. Nothing in Galbraith teaches or suggests that the CO_2 produced by the cooling material 38, magnesium

carbonate containing propellant 72, or magnesium carbonate cooling bed 76 combined with the CO_2 produced by the solid propellant 14 is dispelled into a space at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide. Rather, since the gases exiting the apparatus of Galbraith include CO_2 from the cooling material 38, magnesium carbonate containing propellant 72, or magnesium carbonate cooling bed 76 and from the solid propellant 14, the CO_2 dispelled by the apparatus would be at a concentration greater than the Immediately Harmful to Life or Health concentration of carbon dioxide.

Canterberry does not cure the deficiency in Galbraith because Canterberry is silent about details of a fire suppression device and its operation. Therefore, Canterberry does not teach or suggest a fire suppression system that is configured to dispel, at an exit thereof, the first gas mixture and a second gas mixture comprising carbon dioxide into a space to provide carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide in the space. Furthermore, as described previously, while Canterberry teaches the amount of carbon dioxide produced by combustion of gas generating compositions that include 5-aminotetrazole (an azole) as the non-azide fuel, Canterberry does not teach or suggest the amount of carbon dioxide produced by a non-azide, non-azole, non-aminoguanidine nitrate, non-triaminoguanidine nitrate gas generant. While Canterberry teaches that oxamide may be used as the fuel, Canterberry does not teach or suggest specific compositions that include oxamide. Therefore, Canterberry does not teach or suggest the amounts of carbon dioxide produced upon combustion of a composition that includes oxamide. Furthermore, one of ordinary skill in the art would expect an oxamide-containing composition, upon combustion, to produce a greater amount of carbon dioxide than is produced by a similar composition that contains 5-aminotetrazole for the reasons previously described.

In addition, there is no reason in the applied references, common knowledge, or the nature of the problem itself to modify the references in the manner asserted by the Examiner for substantially the same reasons as discussed above with respect to claim 1.

Claim 117

Galbraith and Canterberry, alone or in combination, do not teach or suggest all of the limitations of claim 117 because neither reference teaches or suggests the limitation of "the fire suppression system configured to dispel, at an exit thereof, at least a portion of the inert gas mixture, the dispelled inert gas mixture comprising carbon dioxide in a concentration equal to the concentration pyrotechnically produced by the at least one non-azide, non-azole gas generant." Galbraith does not teach or suggest these limitations for substantially the same reasons as discussed above with respect to claims 1 and 116. Specifically, Galbraith does not teach or suggest that the inert gas mixture, which its apparatus is configured to dispel, comprises carbon dioxide in a concentration equal to the concentration pyrotechnically produced by the at least one non-azide, non-azole gas generant. Rather, Galbraith teaches the addition of CO_2 from the cooling material 38, magnesium carbonate containing propellant 72, or magnesium carbonate cooling bed 76. Canterberry does not cure the deficiency in Galbraith because Canterberry does not teach that the fire suppression system is configured to dispel, at an exit thereof, at least a portion of the inert gas mixture, the dispelled inert gas mixture comprising carbon dioxide in a concentration equal to the concentration pyrotechnically produced by the at least one non-azide, non-azole gas generant.

In addition, there is no reason in the applied references, common knowledge, or the nature of the problem itself to modify the references in the manner asserted by the Examiner for substantially the same reasons as discussed above with respect to claim 1.

Claim 118

Galbraith and Canterberry, alone or in combination, do not teach or suggest all of the limitations of claim 118 because neither reference teaches or suggests the limitation of "the fire suppression system configured to dispel, at an exit thereof, the inert gas mixture as pyrotechnically produced into a space, the space comprising carbon dioxide at less than approximately 4% by volume." Galbraith and Canterberry do not teach or suggest these

limitations for substantially the same reasons as discussed above with respect to claims 1 and 116.

Obviousness Rejection Based on Galbraith in View of Canterberry and Further in View of U.S. Patent No. 5,538,568 to Taylor *et al.* and U.S. Patent No. 5,882,036 to Moore *et al.*

Claims 15, 70, 79, 80, 94, and 95 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and further in view of U.S. Patent No. 5,538,568 to Taylor *et al.* ("Taylor") and U.S. Patent No. 5,882,036 to Moore *et al.* ("Moore"). Applicants note that two "Taylor" references are of record in the instant application. Since the Final Office Action and previous Office Actions have rejected these claims "in view of Taylor" but have not identified a specific "Taylor" reference, Applicants have treated the rejections as being in light of U.S. Patent No. 5,538,568 to Taylor *et al.* Applicants respectfully traverse this rejection, as hereinafter set forth.

The teachings of Taylor and Moore are summarized on p. 21 of the January 11, 2007 Response.

The nonobviousness of independent claims 1 and 57 precludes a rejection of the above-mentioned claims, which respectively depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claims 15, 70, 79, 80, 94, and 95 are allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Further in View of Taylor and U.S. Patent No. 6,481,746 to Hinshaw *et al.*

Claims 16, 71, and 81-90 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry and further in view of Taylor and U.S. Patent No.

6,481,746 to Hinshaw *et al.* ("Hinshaw"). Applicants respectfully traverse this rejection, as hereinafter set forth.

The teachings of Hinshaw are summarized on p. 27 of the March 2, 2009 Response.

The nonobviousness of independent claims 1 and 57 precludes a rejection of the above-mentioned claims, which respectively depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claims 16, 71, and 81-90 are allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Further in View of U.S. Patent No. 5,739,460 to Knowlton *et al.*

Claims 19-21 and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and further in view of U.S. Patent No. 5,739,460 to Knowlton *et al.* ("Knowlton"). Applicants respectfully traverse this rejection, as hereinafter set forth.

The teachings of Knowlton are summarized on p. 24 of the January 11, 2007 Response.

The nonobviousness of independent claims 1 and 57 precludes a rejection of the above-mentioned claims, which respectively depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claims 19-21 and 76 are allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Further in View of U.S. Patent No. 6,116,348 to Drakin

Claims 26-28, 31-45, 48, 49, and 53-56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and further in view of U.S. Patent No.

6,116,348 to Drakin ("Drakin"). Applicants respectfully traverse this rejection, as hereinafter set forth.

The teachings of Drakin are summarized on p. 20 of the October 31, 2007 Response.

The nonobviousness of independent claim 1 precludes a rejection of the above-mentioned claims, which depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claims 26-28, 31-45, 48, 49, and 53-56 are allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Drakin and Further in View of Taylor and Moore

Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and Drakin, and further in view of Taylor, and Moore. Applicants respectfully traverse this rejection, as hereinafter set forth.

The nonobviousness of independent claim 1 precludes a rejection of the above-mentioned claim, which depends therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claim 46 is allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Drakin and Further in View of Taylor and Hinshaw

Claim 47 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and Drakin, and further in view of Taylor, and Hinshaw. Applicants respectfully traverse this rejection, as hereinafter set forth.

The nonobviousness of independent claim 1 precludes a rejection of the above-mentioned claim, which depends therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claim 47 is allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Drakin and Further in View of Knowlton

Claims 50-52 and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and Drakin, and further in view of Knowlton. Applicants respectfully traverse this rejection, as hereinafter set forth.

The nonobviousness of independent claims 1 and 57 precludes a rejection of the above-mentioned claims, which respectively depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* M.P.E.P. § 2143.03.

Therefore, dependent claims 50-52 and 76 are allowable, *inter alia*, as depending from an allowable base claim.

Obviousness Rejection Based on Galbraith in View of Canterberry and Further in View of Hinshaw

Claims 107-114 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Galbraith in view of Canterberry, and further in view of Hinshaw. Applicants respectfully traverse this rejection, as hereinafter set forth.

The obviousness rejection of claims 107-114 is improper because the applied references do not teach or suggest all of the claim limitations. In addition, there is no reason in the applied

references, common knowledge, or the nature of the problem itself to combine the applied references in the manner asserted by the Examiner.

The applied references do not teach or suggest the limitation in claim 107 of "the fire suppression system configured to dispense, at an exit thereof, the inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant." Galbraith and Canterberry do not teach or suggest this limitation for substantially the same reasons as discussed above for claim 1. Hinshaw does not cure this deficiency in Galbraith and Canterberry because nothing in Hinshaw teaches a fire suppression system that is configured to dispense an inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant.

In addition, there is no reason in the applied references, common knowledge, or the nature of the problem itself to modify the references in the manner asserted by the Examiner. The Examiner states "[i]t would have been obvious . . . to have made the gas generant of Galbraith and Canterberry et al. comprising a combination of the elements as taught by Taylor et al. and Hinshaw et al. since Taylor et al. and Hinshaw et al. teach such elements for forming a gas generant are know[n] in the art and the combination of these elements would properly form a gas generant." Office Action of August 13, 2009, p. 7. While the Examiner's reason for combining the applied references refers to Taylor, Applicants herein treat the obviousness rejection as being in light of Galbraith, Canterberry, and Hinshaw since the Examiner did not specifically include Taylor in the obviousness rejection. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01 (emphasis in original). Since nothing in Galbraith, Canterberry, or Hinshaw suggests the desirability of the combination, the Examiner's reason for combining the applied references appears to be a hindsight attempt to gather elements for bringing them together with the benefit of Applicants' disclosure.

Dependent claims 108-114 are allowable, *inter alia*, as depending from an allowable base claim.

ENTRY OF AMENDMENTS

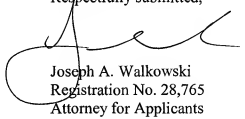
The proposed amendments to the specification should be entered by the Examiner because the amendments do not add new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

Applicants consider claims 1 and 57 to be generic, and note that upon allowance of a generic claim, claims depending therefrom in a non-elected species, namely claims 29, 30, 66, and 67, would also be allowable.

CONCLUSION

Claims 1-5, 7-16, 18-67, 69-90, and 94-119 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,



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KAH/kso/slm
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